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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,566	11/28/2003	Wolfgang Dannhauer	DANN3010/FJD	4991
23364	7590	03/22/2005	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			ALLEN, ANDRE J	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/722,566	Applicant(s) DANNHAUER ET AL.	
	Examiner Andre J. Allen	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Acknowledgment is made of the preliminary amendments filed 11-19-04.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10-15, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Adams (4668889).

Regarding claims 10 and 11 Adams teaches a chamber 20 on the high-pressure side (col. 6 lines 63-65) that is sealed (col. 2 line 26) by a first dividing membrane 10 and filled with a transfer medium, said first dividing membrane 10 is loaded with a pressure acting on the high-pressure side 10, a chamber 22 on the low-pressure side (col. 6 lines 63-65) that is sealed (col. 2 line 26) by a second dividing membrane 12 and filled with a transfer medium (silicon oil) (col. 3 line 18-45), said second dividing membrane 12 is loaded with a pressure acting on the low-pressure side, a pressure-sensitive element 17 which separates said chamber on the high-pressure side from said chamber on the

low-pressure side (fig. 1); and a throttle 50 for damping overload pulses (col. 4 line 31), wherein said throttle 50 is arranged between said pressure-sensitive element and said second dividing membrane (fig. 1).

Regarding claim 12 Adams teaches a pressure-sensitive element having a measuring membrane, especially a piezoresistive silicon chip with a measuring membrane 60 (col. 6 lines 63-69)

Regarding claims 13-18 Adams teaches a throttle having a sintered body (col. 4 lines 30-35) and said sintered body is a metallic or a ceramic sintered body that is porous at a 25% vol. (col. 4 lines 30-35).

3. Claims 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimada et al (US 4527428)

Regarding claims 10 and 11 Shimada et al teaches a chamber 20 on the high-pressure (col. 2 lines 45-46) side that is sealed (col. 3 line 11) by a first dividing membrane 16 and filled with a transfer medium, said first dividing membrane 16 is loaded with a pressure acting on the high-pressure side 10 (col. 2 line 39), a chamber 22 on the low-pressure side that is sealed (col. 3 line 12) by a second dividing membrane 18 and filled with a transfer medium (silicon oil) (col. 3 line 3), said second dividing membrane 18 is loaded with a pressure acting on the low-pressure side, a pressure-sensitive element 24 which separates said chamber on the high- pressure side from said chamber on the

low-pressure side (fig. 1); and a throttle 30 for damping overload pulses (inherent), wherein said throttle 30 is arranged between said pressure-sensitive element and said second dividing membrane (fig. 1).

Regarding claim 12 Shimada et al teaches a pressure-sensitive element has a measuring membrane 60, especially a piezoresistive silicon chip with a measuring membrane 60 (col3 lines 36-45).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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Claim 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (4668889).

Regarding claim 16 Adams does not teach said porous structure has an effective flow pore diameter of not less than 4 micro-m and not more than 28 micro-m, preferably between 8 micro-m and 16 micro-m. It would have been obvious to a person having ordinary skill in the art of manufacturing pressure sensors at the time the invention was made to modify Adams to include a porous diameter (4 micro-m and not more than 28 micro-m, preferably between 8 micro-m and 16 micro-m), since it has been held that where the general conditions of a claim are disclosed in the prior art. discovering the optimum or workable ranges involves only routine skill in the art. In this case, since Adams teaches a porous material, it would be implicit for the material to have dimensions for the pores therefore it would be obvious for a person having routine skill in the art to modify these dimensions for the purpose creating a porous material that performs at optimum levels.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patents 4995266 and 4713969 teach pressure sensing devices pertinent to the applicants claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre J. Allen whose telephone number is 571-272-2174. The examiner can normally be reached on mon-fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

André Allen
Patent Examiner
Art Unit 2855



MICHAEL CYGAN, PH.D.
PRIMARY EXAMINER